## **Response to Comment G4-18**

As described in the DEIR/EIS, Shuford et al. (2000) reported that most of the 21 colonial bird nest sites were concentrated near the Whitewater River mouth at the north end of the Sea or between and including the New and Alamo River deltas along the southeastern shoreline. Under the Proposed Project, the rivers would continue to flow to the sea and provide fresh water that would maintain tamarisk along the banks of the rivers. Thus, trees and large shrubs in the deltas and at the river mouth that are used by herons, egrets, and other bird species for communal rookeries would persist.

Some colonial nest sites are located in or near areas designated as shoreline strand. Existing areas of shoreline strand could be lost as the surface elevation of the Sea recedes although, as described in the Draft EIR/EIS, it is uncertain whether and to what degree shoreline strand communities would be affected as the surface elevation of Sea declines. The surface elevation of the Salton Sea is projected to decline with or without implementation of the water conservation and transfer project, and if shoreline strand areas are sensitive to the surface elevation of the Salton Sea, changes in the extent of shoreline strand would take place irrespective of the Proposed Project. Therefore, potential changes in shoreline strand and adjacent wetlands were considered a less than significant impact.

The Proposed Project also includes implementation of the Salton Sea Conservation Strategy of the HCP. Under the HCP, IID would supply water to the Salton Sea such that the salinity did not exceed 60 ppt until 2030. As described in the Master Response for *Biology—Approach to Salton Sea Habitat Conservation Strategy* in Section 3 of this Final EIR/EIS, supplying this water to the Sea would maintain the surface elevation at a higher level than would be the case in the absence of the Proposed Project. Maintaining a higher surface elevation means that any changes in the extent of shoreline strand potentially occurring as the surface elevation declines would be delayed, so the habitat values of these areas would be maintained longer than would be the case under the No Action Alternative. Furthermore, after 2030, IID would monitor shoreline strand and adjacent wetland areas and compensate for net changes relative to existing conditions by acquiring or creating native tree habitat. Under the No Action Alternative, there would be no compensation for reduction in the acreage of shoreline strand and adjacent wetlands. Therefore, relative to the No Action Alternative, the Proposed Project would have beneficial effects.

#### **Response to Comment G4-19**

It is acknowledged that the current level of use of Mono Lake and the Salton Sea by certain species of birds differs. The reasons for the differences, however, are uncertain, and it is not appropriate to conclude that because a particular species currently uses Mono Lake at a low level, it will therefore use the Salton Sea at a low level when the sea transitions to a system dominated by halotolerant invertebrates. The level of use of a particular resource by a particular species is influenced by many factors, of which the composition of the food resource is only one factor. The comparison of use of Mono Lake by various bird species that also use the Salton Sea was intended to show that: 1) many species using the Salton Sea can and do find food at Mono Lake, and 2) a transition to a more saline environment would not be expected to eliminate the Salton Sea as an important migratory stopover for birds.

Exactly how the vertebrate and invertebrate communities of the Salton Sea will respond to increases in salinity, and in turn how birds will respond, cannot be predicted. Despite historical differences, Mono Lake and the Great Salt Lake provide the best examples of what the Salton Sea might look like as its salinity increases. Migratory bird use of both of these lakes is very high, suggesting that migratory bird use will continue to be high at the Salton Sea. The exact species composition and relative abundance of migratory birds using the Salton Sea probably will change over time as food resources change at the Sea and bird populations respond to factors in other portions of their ranges. It is important to recognize that the composition and abundance of birds at the Salton Sea have historically fluctuated and transitioned over time. For example, black skimmers were unknown at the Salton Sea until 1972, but since then the population nesting at the sea has increased considerably. Double-crested cormorants nested at the sea in small numbers until 1999, when a large breeding colony became established on Mullet Island. Use of the Salton Sea by migrating and wintering white pelicans appears to have been low until the 1980s, after which the number of birds using the Sea increased.

Under both the No Action and Proposed Project, the salinity of the Sea will increase, resulting in transitions in the aquatic vertebrate and invertebrate communities and in the avian community exploiting these resources. There is no basis for assuming that biological resources of the Salton Sea would respond in a qualitatively different manner to increased salinity under the Proposed Project than under No Action conditions.

629629 5-629

Elston Grubaugh

April 25, 2002 Page 13 of 16

DEIR/DEIS suggests that a less than significant impact will occur to the piscivorous birds. The proposed project will accelerate various processes that will negatively impact fish-eating birds at the Salton Sea (reduced water levels, reduced fish supplies). No discussion is made of what will happen to the largest breeding colony of Double-crested Cormorants in California and one of the largest in the West (Carter et al. 1995). Double-crested Cormorants that breed at the Salton Sea are birds from a distinct subspecies, *Phalacrocorax auritus albociliatus*, and this subspecies does not appear to go east of the Rockies (Hatch 1995, Carter et al. 1995). The California coastal population is estimated at only 10,000+ pairs. The 5425 nesting pairs documented at the Salton Sea in 1999 would represent over 50% of the entire California coastal population. The accelerated loss of water in the sea under the proposed project will provide this population and other fish-eating birds significantly less time to find other suitable breeding sites (if this is even possible) than the baseline project. No discussion is made of this.

#### (k) IMPACT BR - 48. REDUCED SEA ELEVATION COULD AFFECT NESTING/ROOST SITES.

DEIR/DEIS suggests that a less than significant impact on biological resources will occur. One species that is not adequately evaluated is the Snowy Plover. The Salton Sea supports the largest inland breeding populations of Snowy Plovers in the west (Shuford et al. 2000). Changes to the slope of the shoreline, if it becomes steeper, could negatively impact the breeding birds and this should be evaluated, particularly on the SE, S, and SW sides of the sea where plovers are known to concentrate and breed.

For most of the colonial breeders, there is little discussion about what the potential impacts of having no snags in the water will do to breeding populations. The DEIR/DEIS makes the statement that "Because of the small temporal difference in the snag connecting to the mainland, and considering that herons and egrets nest and roost in snags that are not surrounded by water, the Proposed Project would not significantly affect communal rookeries in snags or trees at the Salton Sea" (p. 3.2-157). No documentation is given to support this statement. Currently, most arboreal breeders at the sea are nesting either over the water or next to it at places like *Tamarix* groves along the mouth of the New and Alamo rivers (Shuford et al. 2000).

# (I) IMPACT BR - 49. REDUCED SEA ELEVATION COULD AFFECT MUDFLAT/SHALLOW WATER HABITAT

DEIR/DEIS suggests that a less than significant impact on biological resources will occur. It has been well demonstrated that water depth can be predictive of waterbird species (Velasquez 1992, 1993; Elphick and Oring 1998). Shorebirds generally do not feed in water at depths much greater than about 10-15 cm (Warnock et al. in prep.), and most prefer water depths under about 4 cm (Isola et al. 2000), except for those that swim like the phalaropes. The bathemetric models are probably not accurate enough to evaluate changes in shallow water habitat of less than 1 foot. It is especially troubling that the shallow impounded areas around the southern and SE side of the sea will be rapidly lost under the Proposed Project since the majority of shorebirds (over 75%, Warnock, Shuford and Molina in prep.) at the Salton Sea are found there. Effects on shallow water habitat in this area as well as at the north end of the sea should be better evaluated.

G4-21

G4-20

G4-22

### Letter - G4 Page 13

#### **Response to Comment G4-20**

The Draft EIR/EIS has been revised to more specifically address effects to double-crested cormorants from reductions in the water surface elevation of the Salton Sea. These revisions are found in this Final EIR/EIS in subsection 3.2.4.3 under Section 4.2, Text Revisions.

In addition, the revised Salton Sea Conservation Strategy would avoid accelerating exposure of nesting/roosting features and changes in fish abundance. See the Master Response for *Biology—Approach to Salton Sea Habitat Conservation Strategy* in Section 3 in this Final EIR/EIS.

#### **Response to Comment G4-21**

Areas currently used by snowy plovers for nesting will become farther removed from the water as the water surface elevation of the Salton Sea declines. A decline in the water surface elevation is projected to occur under both the Proposed Project and the No Project alternative. Thus, to the extent that distance to water influences suitability of breeding sites for snowy plovers, existing nesting areas will become unsuitable under both the Proposed Project and the No Project alternative and therefore is not an impact attributable to the Proposed Project.

The commenter suggests that at a reduced sea elevation, near shore areas will be too steep to be suitable for snowy plover nesting. Bathymetric data show a general pattern of increasing acreage of shallow sloped areas with declining surface elevation. At most of the lower elevations, the amount of shallow sloped areas (as indicated by acreage less than 1 foot) is greater than at the current elevation. This information suggests that suitably sloped areas would be available for snowy plovers at lower elevations. In addition, because of concerns expressed by USFWS, CDFG, and others commenting on the HCP, IID has eliminated Approach 1 and revised the HCP to reflect the new approach (see Attachment A to the present document).

#### Response to Comment G4-21 (continued)

Impacts of the Proposed Project are assessed relative to the No Project alternative. As described under the No Project alternative, snags in the Salton Sea that are currently surrounded by water would no longer be surrounded by water as the water surface elevation declines. Herons and egrets could abandon use of snags as nesting and roosting sites when they are no longer surrounded by water. This effect could occur under both the No Project and the Proposed Project, the only difference being that it could happen 3 years earlier under the Proposed Project. Thus, the potential for abandonment of snags as nesting and roosting sites is not a consequence of the Proposed Project and therefore is not considered a significant impact of the Proposed Project. Further, herons and egrets are known to nest in snags and trees that are not surrounded by water (Kaufman 1996; Shuford et al. 2000), suggesting that birds may continue to use snags at the Salton Sea when they are no longer surrounded by water. Finally, with implementation of the Salton Sea Conservation Strategy, the acceleration of exposure of nesting/roosting sites would be avoided. See the Master Response on *Biology—Approach to Salton Sea Habitat Conservation Strategy* in Section 3 in this Final EIR/EIS.

### **Response to Comment G4-22**

The bathymetric data are not accurate enough to precisely predict the amount of shallow water habitat in the 4-15 cm depth range. However, they do reasonably predict changes in the amount of habitat of less than 1 foot depth, some of which would be in the 4-15 cm range preferred by shorebirds. The area less than 1 foot deep provided an index of the possible dynamics of shallow water habitat and constituted the best available quantitative information.

The amount of shallow water habitat (< 1 foot deep) would increase under the Baseline from 1,143 acres at an elevation of -227 ft msl to about 3,600 acres at -235 ft msl. The Proposed Project would show a similar pattern. Although the perimeter of the Sea would decrease to 83 miles, the amount of shallow water habitat would increase to about 3,200 acres at -246 ft msl. The bathymetry analysis indicates that both the Baseline and Proposed Project would increase the amount of shallow water/mudflat habitat to a similar degree relative to existing conditions. There is no indication that there will be a net loss of shallow water/mudflat area under either the Baseline or Proposed Project conditions.

Existing shallow water/mudflat habitat could be lost or reduced in certain areas as the Sea recedes. These existing areas would be lost at the same rate under the Proposed Project and No Project alternative. Also, under both alternatives, new areas of shallow water/mudflat habitat would also be created at lower elevations. As the shallow impounded areas at the southern and southeast side of the Sea are lost due to elevation declines, new shallow impounded areas will likely be created either in the vicinity or in other areas of the Sea. Conversion of drains into gravity-flow systems will allow water from the drains to flow naturally to the Sea. The drains likely would create "mini-deltas" at each outlet as the water spreads out and meanders to the Sea. Foraging habitat for shorebirds could improve under this situation by (1) an increase in the amount of shallow water/mudflat habitat, and (2) creation and maintenance of lower salinity areas where a greater diversity of invertebrates can persist. As shorebirds are mobile and able to utilize different areas as habitat conditions become suitable, it is unlikely that negative impacts to shorebirds will occur as shallow water/mudflat areas shift locations.

In areas along the southern portion of the Sea, barnacle bars and other topographic variations back up drainwater and create small, shallow impoundments where shorebirds forage. To the degree that water from the Sea also contributes to determining the extent and depth of these impoundments (i.e., creates a backwater effect), the extent of inundation and characteristics of these areas could change as the Sea recedes. These potential changes would occur under both the Proposed Project and Baseline.

At the north end of the Sea, there could be a net reduction in the amount of shallow water/mudflat habitat. The topography of the seabed is much steeper than at the south end of the Sea. Thus, as the Sea recedes and the total length of shoreline becomes smaller, the amount of mudflat/shallow water habitat would decline. This effect would be greater under the Proposed Project than the Baseline. However, the Whitewater River could create a more extensive delta with greater amounts of shallow water/mudflat habitat as its discharge spreads out as the Sea pulls away from the river mouth. Increased flow from the CVWD Service Area could enhance this effect.

Under both the Proposed Project and Baseline, shallow water/mudflat habitat could be lost or reduced as the Sea recedes, but under both alternatives, new areas of shallow water/mudflat habitat also would be created as the Sea recedes. Because the magnitude and likelihood of changes in amount and characteristics of shallow water/mudflat habitat, either positively or negatively, does not differ between the Proposed Project and Baseline, the Proposed Project would not significantly affect the availability of this habitat type. All of these potential impacts to shallow water/mudflat habitat are described under Impact BR - 49. The analysis was based on the best available information on the bathymetry of the Sea and the potential changes in Sea elevation under the Proposed Project.

631631 5-631

Elston Grubaugh April 25, 2002 Page 14 of 16

#### VI. PUBLIC HEALTH AND AVIAN RESPIRATORY EFFECTS

A recent article in Environmental Health Perspectives entitled "Dust in the Wind" states:

The GOCART model identified 10 main global sources of dust: 1) the Salton Sea, 2) Patagonia, 3) the Altiplano, 4) the Sahel region, 5) the Sahara Desert, 6) the Namibian Desert lands, 7) the Indus Valley, 8) the Taklimakan desert, 9) the Gobi desert, and 10) the Lake Eyre Basin.

This model, developed by Georgia tech with NASA, uses seven categories of particle size ranging from 0.1 - 6 um in radius and air stream movement. EPA has standards for particulate matter of up to 10 um diameter and less than 2.5 um in diameter. Dust particles as large as 10 um can deposit in the lung airways and cause bronchial constriction. Particles less than 2.5 um are now believed to have the greatest effect on human health. While asthma has many causes, increased bronchial constriction would not benefit an asthma sufferer. New research has shown that fine dust can be a threat to people with cardiovascular illness if it inflames the alveoli in the lungs, which in turn release harmful cytokines and thicken the blood. This reaction may put some people, including the elderly, the very young, and people with heart disease, flu, and asthma, at risk for cardiac death.

According to the California Department of Health Services, age-adjusted asthma hospital discharge rates for children (aged 0-14 years) in Imperial County are 2.4 times higher than in any other county in California. This figure does not include clinic or private physician visits for asthma and other respiratory diseases.

The DEIS/DEIR fails to accurately reflect the true situation in Imperial County, e.g. how even slight additions to the PM10 load can greatly affect human health. Very little is known about PM10's effect on avian respiratory systems, but there is data available.

#### Recommendation

The human and avian health aspects of the air quality impacts must be evaluated in detail in the DEIS/DEIR.

#### Conclusion

G4-24

G4-23

For all of the forgoing reasons, the Audubon finds that IID and USBR's DEIR/DEIS for the proposed water transfer between IID and SDCWA fails to meet the standards of either NEPA or CEQA. Our groups oppose any water transfer unless – as an integral part of such a project – adequate, reliable and enforceable avoidance and mitigation measures are incorporated into the

### Letter - G4 Page 14

#### **Response to Comment G4-23**

Commenter refers to a recent article in Environmental Health Perspectives entitled "Dust in the Wind", Volume 110, No. 2, February 2002, p. 80 (Ginoux et al. 2002). This article refers to research by Paul Ginoux and others at the Georgia Institute of Technology. The article indicates that Ginoux and his colleagues have identified 10 main sources of global dust events, including the Salton Sea. Mr. Ginoux was contacted to determine the accuracy of the article in reporting the Salton Sea as one of 10 main sources of global dust. His email response, dated 5/24/2002, indicates that the source in question should have been Owens Lake, not the Salton Sea.

Also, please refer to the following Master Responses in Section 3 of this Final EIR/EIS:. Air Quality—Salton Sea Air Quality Monitoring and Mitigation Plan; and Air Quality—Health Effects Associated with Dust Emissions.

#### **Response to Comment G4-24**

Comment noted. Responses to the specific comments made in your letter regarding these issues are provided.

<sup>37 &</sup>quot;Dust in the Wind," Environmental Health Perspectives, Vol. 110, No 2, Feb 2002, p.80.

Elston Grubaugh April 25, 2002 Page 15 of 16

G4-24

project to reduce or avoid the projects impacts on public health, wildlife and biological resources throughout Southern California, including the project's growth inducing impacts.

Sincerely,

J/William Yeates Attorney at Law

Literature Cited

Letter - G4 Page 15 «ContactName» «TodayDate»

Page 16 of 16

Anonymous. 1999. Endangered and threatened wildlife and plants: proposed threatened status for the Mountain Plover. Federal Register 64:7587-7601.

Brown, S., C. Hickey, B. Harrington, and R. Gill. 2001. The U.S. Shorebird Conservation Plan. 2nd Edition. Manomet Center for Conservation Sciences, Manomet, Massachusetts.

Carter, H. R., A. L. Sowls, M. S. Rodway, U. W. Wilson, R. W. Lowe, G. J. McChesney, F. Gress, and D. W. Anderson. 1995. Population size, trends, and conservation problems of the Double-crested Cormorant on the Pacific Coast of North America. Colonial Waterbirds 18 (Special Edition):189-215.

Eddleman, W. R., R. E. Flores, and M. L. Legare. 1994. Black Rail (*Laterallus jamaicensis*), in the Birds of North America, No. 123. (A. Poole and F. Gill, eds.). Acad. Nat. Sci., Philadelphia, PA.

Elphick, C. S., and L. W. Oring. 1998. Winter management of California rice fields for waterbirds. Journal of Applied Ecology 35: 95-108.

Evens, J. G., G. W. Page, S. A. Laymon, and R. W. Stalleup. 1991. Distribution, relative abundance and status of the Black Rail in western North America. Condor 93:952-966.

Flores, R. E., and W. R. Eddleman. 1993. Nesting biology of the California Black Rail in southwestern Arizona. Western Birds 24:81-88.

Hatch, J. J. 1995. Changing populations of Double-crested Cormorants. Colonial Waterbirds 18 (Special Edition):8-24.

Isola, C. R., M. A. Colwell, O. W. Taft, and R. J. Safran. 2000. Interspecific differences in habitat use of shorebirds and waterfowl foraging in managed wetlands of California's San Joaquin Valley. Waterbirds 23: 196-203.

Patten, M. A., P. Unitt, and G. McKaskie. In press. Birds of the Salton Sea: status, biogeography, and ecology. University of California Press, Berkeley.

Shuford, W. D., N. Warnock, and K. C. Molina. 1999. The avifauna of the Salton Sea: a synthesis. Report prepared for the Salton Sea Authority and EPA.

Shuford, W. D., N. Warnock, and R. L. McKernan. Patterns of shorebird use of the Salton Sea and adjacent Imperial Valley, California, accepted, Studies in Avian Biology.

Shuford, W. D., N. Warnock, and K. C. Molina. In press. The importance of the Salton Sea, California to Pacific Flyway waterbirds. Hydrobiologica.

Velasquez, C. 1992. Managing artificial saltpans as a waterbird habitat: species' response to water level manipulation. Colonial Waterbirds 15: 43-55.

Velasquez, C. 1993. The ecology and management of waterbirds at commercial saltpans in South Africa. Unpublished Ph.D. dissertation. University of Capetown, South Africa.

Warnock, N., W. D. Shuford and K. Molina. Annual distribution pattern of waterbirds at the Salton Sea, California, 1999. accepted. Studies in Avian Biology.

Letter - G4
Page 16

## Alliance for Habitat Conservation

780 W. G Street, Suite 481 San Diego, CA 92101 Phone: 619.2368397 Fax: 619.2368497

April 22, 2002

Mr. Bruce D. Ellis U.S. Bureau of Reclamation Phoenix Area Office PO Box 81169 Phoenix, AZ 85069-1169 Mr. Elston Grubaugh Manager, Resources, Mgmt., & Planning Imperial Irrigation District

PO Box 937 Imperial, CA 92251 APR 2 5 2002

RESOURCES PLANSING
A MANAGEMENT DEPARTMENT

Re: IID - San Diego County Water Authority Water Transfer

Dear Mr. Ellis and Mr. Grubaugh:

As a long-time supporter of the IID- San Diego County Water Authority water transfer project, the Alliance for Habitat Conservation welcomes the chance to comment on the draft EIR/EIS.

The Alliance is a membership organization representing 17 large landowners in San Diego County. Our purpose is to help represent and protect landowner interests while balancing the needs of the environment and our quality of life. We understand the transfer is a necessity for California to live within its 4.4-million acre-foot entitlement of Colorado River water, and maintain the reliability of water that we already depend upon. We have heard a number of comments that criticize the water transfer because of its impacts on the Salton Sea. As the environmental documents show, there are ways to mitigate the effects the transfer may have on the Sea. In fact, depending on the water conservation methods used for the transfer, the impacts of the transfer on the Sea could be quite minimal.

We agree that the Salton Sea is an important resource, but even without the water transfer, the Sea has significant problems that are only getting worse. The Alliance believes the mitigation measures identified in the draft EIR adequately mitigate the transfer's impacts on the Sea, but it must be realized that the transfer cannot and should not bear the burden of saving an already declining Sea. We support the ongoing efforts to find a reasonable means of restoring the Sea's values, but the outcome of that effort should not determine whether this vital water transfer would be allowed to take place.

Thank you for your consideration on this issue. If you or your staff has any questions or comments, please feel free to contact me at (619) 236-8397.

Sincerely,

Craig Benedetto Executive Director

## Letter - G8. Alliance for Habitat Conservation. Signatory - Craig Benedetto.

#### Response to Comment G8-1

Comment noted.

#### **Response to Comment G8-2**

Refer to the Master Response on *Other—Relationship Between the Proposed Project and the Salton Sea Restoration Project* in Section 3 of this Final EIR/EIS.

G8-1

G8-2



geir-eiscomments

March 19, 2002

Elston Grubaugh, Manager Resources Planning and Management Dept. Imperial Irrigation District P O. Box 937 Imperial, CA 92251

Dear Mr. Grubaugh:

G11-1

G11-2

G11-4

RE: Imperial Irrigation District Water Conservation and Transfer Project Draft Habitat Conservation Plan/Draft Environmental Impact Report/Environmental Impact Statement.

The proposed water transfer agreement with the San Diego County Water Authority provides for off-ramps at \$15 million and \$30 million if mitigation cost exceeds these limits. It would have been helpful if the documents had provided more guidance as to what could be accomplished within these limits.

The Draft EIR/EIS and HCP has various flaws, but nowhere are these flaws more dramatic than they are in the sections dealing with proposed mitigation for the Salton Sea portion of the HCP. The proposed Salton Sea Habitat conservation strategy seeks to benefit exotic species and either stabilize or delay salinity related problems of the Salton Sea. This will adversely affect many native species and prevent the return of more natural landform to the Salton Sink. These exotic species include Tamarisk (from the Mediterranean Area), tilapia (from Africa), and several fish and other organisms (from the Sea of Cortez), the black-skimmer (not reported in California until 1962, or the Salton Sea area until 5 years later). Why does the HCP place such emphasis on mitigating for these exotic species? Why does the HCP put such strong emphasis on four bird species, American white pelican, brown pelican, black-skimmer, and double-crested cormorant?

The EIR/EIS refers to exotic species in several places without identifying these exotic species. This is a significant omission and should be corrected.

#### Section 2.2.6.7 Implementation of the HCP Conservation Strategies, Approach 1 and Approach 2 of the Salton Sea Habitat Conservation Strategy.

First I will discuss the serious flaws in the proposed tilapia hatchery approach and how this approach seriously impact the proposed pupfish mitigation plan. Next, I will proposed an alternative approach to Approach 1 and Approach 2 which will focus on mitigation relating to the receding shoreline.

#### HATCHERY PLAN

Approach 1 of the EIR Section "2,2,6,7 -Implementation of the HCP Conservation Strategies," specifically titled "Hatchery and Habitat Replacement cans to the Color the EIR. The tidapia of a tilapia hatchery by IID. This section is found on pages 2-50 to 2-52 of the EIR. The tidapia of a tilapia hatchery by IID. specifically titled "Hatchery and Habitat Replacement" calls for the construction and operation hatchery is not for the purpose of recreational fishing, not for the benefit of fish but for the



Letter - G11. Fish Partners. Signatory - George Ray.

#### Response to Comment G11-1

The contractual off-ramps included in the IID/SDCWA Transfer Agreement provide an option to IID to cancel the water transfer, both (1) prior to initial commencement of transfers, if the present value of projected mitigation costs exceeds \$15 million after completion of environmental review, and (2) during the Project term, if the present value of the costs of the original mitigation plus unanticipated environmental consequences exceeds \$30 million. The off-ramp amounts were established based upon the economic terms of the transfer transaction, including the purchase price to be paid for the water. They represent amounts that IID determined it could afford to pay given the transfer revenue. The off-ramp amounts are not limitations on the mitigation which IID, as Lead Agency, may determine is required based upon the Draft EIR/EIS, nor do they represent estimates of mitigation costs.

## **Response to Comment G11-2**

IID has elected to cover certain species with special state and/or federal status in its Habitat Conservation Plan. To receive state and federal incidental take permits, IID must minimize and mitigate take of covered species that could occur from covered activities. The primary fish-eating bird species covered by the HCP include black skimmer, brown pelican. white pelican, and double-crested cormorant; thus they receive the greatest emphasis with respect to the mitigation strategy of the Salton Sea. A number of other covered species have the potential to use tamarisk scrub adjacent to the Salton Sea, and potentially take could occur from reductions in this habitat. Thus, even though tamarisk is a non-native species, the HCP includes mitigation for the potential lost habitat value.

See also responses to Comments G1-4 and G1-5, and Master Response for Biology—Approach to Salton Sea Habitat Conservation Strategy in Section 3 of this Final EIR/EIS.

#### Response to Comment G11-3

Where appropriate, text of the EIR/EIS has been modified to identify "exotic" species. In some instances, the word "exotic" has been changed to the more specific term "introduced." The changes are indicated in this Final EIR/EIS in subsection 3.2 under Section 4.2, Text Revisions.

(760) 359-3474

## **Response to Comment G11-4**

Please refer to the responses given for Comments G1-6 through G1-11.

637637 5-637

benefit of "the hirds". According to the draft EIR/EIS this approach was proposed by USFWS and CDFG.

Exactly what is the problem with this tilapia hatchery proposal? Tilapia, although they have a high tolerance for a wide range of water salinity levels, do not have a high tolerance for a wide range of water temperatures. The tilapia immune system does not function well at temperatures around 60 degrees F, and below. When exposed to low temperatures for a few days, tilapia began to die, usually from parasites and other diseases. Tilapia almost never survive through the lst of January in IID's irrigation delivery canals, in the New River and the Alamo River, and in my ponds, which average about 4 feet deep. Frequently, tilapia began dying in early December. Two year ago tilapia began dying in my ponds as early as the middle of November. Typically tilapia do not survive throughout the winter in my ponds. Only when Imperial valley has an unusually warm winter do tilapia survive in these systems throughout the winter months.

Some tilapia do, however, survive winters here in the valley. But these tilapia survive only in warm waters associated with tile drains, springs or wells, and, as you know, the Salton Sea.

Why are tilapia able survive in the Salten Sea during the winter? I do not have a definitive scientific answer to this question. But probably because of a combination of three reasons: (Number 1) water the Salton Sea does not get as cold as water in shallow ponds and most IID delivery canals, (Number 2) the high salt level may help protect tilapia from parasites and diseases, and (Number 3) tilapia probably retreat to refuges where the water is warmer than the rest of the Salton Sea. This warmer water may be the result of incoming warm water, under sea warm water springs and wells, or geothermal heated sea bottom.

We know the Salton Sea will get saltier and eventually normal recruitment of tilapia will cease in the Salton Sea. Recruitment will fail because of poor fry survival, egg damage, and, eventually, the lack of spawning activity. But the question I raise is: "What will happens to the large population of tilapia in the Salton Sea as a result of a drop in the average water temperature that will occur when the sea level begins to drop?" As the sea level begins to drop, first 1 ft, then 5 ft., and perhaps eventually 18 ft., the average water temperature of the Salton Sea during the winter will also continue to drop. What effect will lower winter water temperatures of the Salton Sea have on tilapia survival?

There is no discussion in the draft EIR/EIS regarding this issue of water temperature on the sustainability of tilapia in the Salton Sea. There is no discussion in the draft EIR/EIS regarding winter survival of tilapia in the proposed 5,000 acres of shallow fish ponds. The draft EIR/EIS does not address the problems and cost of operating a tilapia hatchery with heated water during the winter. The draft EIR/EIS does not address the problem of keeping 500 pounds of tilapia per surface acre alive for the birds during the winter nor does the draft EIR/EIS discuss the issue of creating a zoo like environment where birds will be lined up waiting for the fish trucks to dump their load of food for the birds. The draft EIR/EIS does not address the issue of abnormally concentrating the birds or what effect this feeding operation may have on the birds normal migration habits, particularly the American white pelican.

The 5,000 acres of ponds are required to use first-use canal water rather that drain water or river water -- no reclaimed water -- so much for conservation. The 5,000 acres of ponds are to be sited on productive farm land rather than exposed seabed -- so much for conservation.

The proposed construction and stocking of tilapia in the 5,000 acres of ponds for pelicans, cormorants, and other fish eating birds will likely have a significant negative impact on existing

Letter - G11 Page 2